

**CHARACTERIZATION OF RADIO FREQUENCY (RF) SIGNALS USING  
WAVELET-BASED PARAMETER EXTRACTION**

**ABSTRACT OF THE DISCLOSURE**

**[00132]** Embodiments of the present invention apply wavelets to radio frequency (RF) signals to extract specific characteristics (e.g., jitter, phase variations, frequency variations) so that their timing, phase, and frequency components can be characterized. In one embodiment of the present invention, a Haar wavelet is used to extract timing characteristics. In another embodiment, a Morlet wavelet is used to extract phase characteristics. In still another embodiment, a Morlet wavelet is used to extract frequency characteristics.